

## EAST Search History

Ref #	Hits	Search Query	Dbs	Default Operator	Plurals	Time Stamp
S38	6	("5459342"   "5498975"   "6034536"   "6201404"   "6526559"   "6545501").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/08 17:40
S40	1554	S39 with (count time)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 17:41
S39	31414	(repair\$3 replac\$3) near3 (logic circuit)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 17:41
S41	73	S39 with ((count time) near3 predetermined)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 17:45
S42	5	S39 near6 ((count time) near3 reach\$3)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 17:46
S43	0	S39 near6 ((counter timer) near3 expir\$3)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 17:47
S46	3	S45 same (counter timer)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 17:48
S45	119	(predict\$3 near3 fail\$3) near5 (logic circuit)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 17:48
S44	5	S39 near6 ((count time) near3 exceed\$3)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 17:52
S48	164	S39 same ((count\$3 tim\$3) near3 (reach\$3 exceed\$3 expir\$3))	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 17:53
S49	31	(circuit logic) near3 fail\$3 with (time near3 exceed\$3)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 17:55
S47	11	S39 near6 ((count\$3 tim\$3) near3 (reach\$3 exceed\$3 expir\$3))	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 17:55
S50	9	("5408648").URPN.	USPAT	OR	OFF	2006/08/08 17:59
S55	4	S53 same (count\$3 tim\$3)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 18:02
S54	0	S53 same (counter timer)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 18:02

## EAST Search History

S53	22	S52 with predict\$3	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 18:02
S52	2541	(logic circuit) near3 life	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 18:02
S51	1691055	logic circuit	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 18:02
S57	67	S39 with predict\$5	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 18:08
S56	9	("4851875"   "5572292").PN. OR ("5771420").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/08 18:08
S59	2	S39 near6 (preemptive\$2 pre-emptive\$2)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 18:15
S58	46	S39 near6 predict\$5	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 18:15
S60	3	S39 with (predetermined near3 cycle\$1)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 18:16
S61	58	S39 with periodic\$4	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 18:17
S62	25	S39 near6 periodic\$4	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 18:18
S65	3852	logic near3 fail\$3	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 18:19
S64	275	S63 near7 (predetermined near3 (time count value))	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 18:19
S63	25836	(circuit logic) near3 fail\$3	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 18:19
S67	1570	mtbf	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 18:22
S66	35	S65 near7 (predetermined near3 (time count value))	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 18:22

## EAST Search History

S69	11	replac\$3 near3 (logic circuit) near7 (before near3 fail\$3)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 18:24
S68	5	S67 with S63	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/08 18:24
S70	20	("20020082796"   "20020105355"   "20030107467"   "20030152132"   "20040036495"   "5291419"   "5490475"   "5793126"   "5822218"   "5966527"   "6158381"   "6164816"   "6245583"   "6304836"   "6330526"   "6532570"   "6564166"   "6720195"   "6769805"   "6787799").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/08 18:26
S71	14	("20020003742"   "20030072185"   "4899067"   "5369314"   "5434514"   "5592102"   "5790479"   "5991898"   "6034536"   "6098032"   "6107820"   "6201404"   "6233205"   "6249885"). PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/08 18:36
S72	16	("4163360"   "4598248"   "4742476"   "4992777"   "5021828").PN. OR ("5420571").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/16 12:01
S73	14	("20020003742"   "20030072185"   "4899067"   "5369314"   "5434514"   "5592102"   "5790479"   "5991898"   "6034536"   "6098032"   "6107820"   "6201404"   "6233205"   "6249885"). PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/16 12:06
S74	9	(time near3 (expir\$3 exceed\$3)) with (life near3 (circuit block module logic))	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 12:08
S78	19	S77 not S76	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 12:10
S77	25	S75 same (timer counter)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 12:10
S76	6	S75 with (timer counter)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 12:10
S79	13457	indicat\$3 near3 (repair\$3 replac\$3)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 12:13
S75	547	indicat\$3 near3 (repair\$3 replac\$3) near3 (circuit logic block module)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 12:13

## EAST Search History

S82	2	S80 same (semiconductor (integrated adj circuit))	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 12:14
S80	168	S79 with (timer counter)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 12:14
S81	23	S80 same circuit	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 12:16
S83	380	replac\$3 near3 before near3 fail\$3	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 12:18
S85	13	S83 same (counter timer)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 12:19
S84	4	S83 with (counter timer)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 12:19
S87	2	mtbf near6 (timer counter)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 12:21
S86	9	S85 not S84	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 12:21
S88	27	("4710926"   "4860006"   "5144950"   "5390324"   "5390326"   "5560033"   "5596711"   "5675723"   "5696895"   "5781703"   "5892915"   "5987621"   "6006206"   "6202115").PN. OR ("6370656").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/16 12:25
S91	42498	S83 sa,e S89	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 14:47
S90	10	S89 near6 (time\$1 near3 (exceed\$3 expir\$3 pas\$4 reach\$3 limit))	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 14:47
S92	7	S83 same S89	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 14:48
S93	441	(timer counter) near6 ((circuit logic) near3 fail\$3)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 14:59
S94	3	S93 same reliability	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 15:01
S95	516381	(reach\$3 exceed\$3 pass\$3) near3 (count\$3 value time)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 15:02

## EAST Search History

S96	0	S89 with 35circuit near3 replac\$3	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 15:03
S89	24753	circuit near3 replac\$3	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 15:03
S97	59	S89 with S95	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 15:06
S98	38237	(prevent\$3 avoid\$3) near3 fail\$3	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 15:07
S10 0	75	(timer counter) near6 (fail\$3 near3 until)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 15:22
S99	13	S98 with (replac\$3 near3 time)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 15:22
S10 1	25	("4346459"   "4358823"   "4521871"   "4532594"   "4610013"   "4819232"   "5189316"   "5203003"   "5206778"   "5423037"   "5451892"   "5511161"   "5544077"   "5555404"   "5590061"   "5627962"   "5644700"   "6144251"   "6208170"   "6229343"   "6256744"). PN. OR ("6425092").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/16 15:34
S10 3	9669	(replac\$4 repair\$3) near3 periodic\$4	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 15:35
S10 2	0	replac4	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 15:35
S10 4	68	S103 with (circuit logic)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 15:36
S10 5	42	S103 near6 (circuit logic)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 15:47
S10 7	47	(expiration adj date) near5 (circuit logic)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 15:48
S10 6	169	(expiration adj date) near5 (circuit block logic)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 15:48
S11 0	23035	(semiconductor circuit) near3 reliability	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 15:49

## EAST Search History

S10 9	0	S107 same reliability	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 15:49
S10 8	0	S107 with reliability	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 15:49
S11 1	66	S110 same ((date time) near3 (reach\$3 expir\$5 exceed\$3 pass\$3))	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 15:50
S11 2	13	S110 with ((date time) near3 (reach\$3 expir\$5 exceed\$3 pass\$3))	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 15:51
S11 3	53	S111 not S112	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 16:01
S11 5	2	mtbf near3 counter	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 16:02
S11 4	580133	mtbf ajd counter	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 16:02
S11 7	2932	time near3 failure\$1 near3 mean	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 16:04
S11 6	0	mtbf near3 timer	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 16:04
S11 8	0	S117 near5 (counter timer)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 16:14
S11 9	14	mtbf near3 circuit\$1	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 16:16
S12 2	68	mtbf near3 (determin\$3 measur\$3)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 16:18
S12 1	1785474	mtbf near3 d(termin\$3 measur\$3)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 16:18
S12 0	9	mtbf near3 (semiconductor logic)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 16:18
S12 3	15	("4903327"   "5036532"   "5046082"). PN. OR ("5164923").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/16 16:25

## EAST Search History

S12 5	1	S124 with (counter timer)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 16:26
S12 6	12	S124 same (logic semiconductor circuit)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 16:27
S12 4	107	(time near3 cumulative) near6 fail\$4	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/16 16:27
S1	1	"20050125707".pn.	US-PGPUB	OR	OFF	2006/08/17 11:56
S12 8	357	(replac\$3 repair\$3) near6 (time near3 elaps\$3)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/17 12:03
S12 7	14	("20020003742"   "20030072185"   "4899067"   "5369314"   "5434514"   "5592102"   "5790479"   "5991898"   "6034536"   "6098032"   "6107820"   "6201404"   "6233205"   "6249885"). PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/17 12:03
S12 9	8	S128 with circuit	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/17 12:15
S13 2	524	(time near3 fail\$3) near6 (counter timer)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/17 12:17
S13 1	574	(time near3 fail\$3) near7 (counter timer)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/17 12:17
S13 0	2	S128 with (logic semiconductor)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/17 12:17
S13 5	0	S132 same ((circuit logic semiconductor) near3 repair\$3)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/17 12:18
S13 4	0	S132 same ((circuit logic semiconductor) near3 replac\$3)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/17 12:18
S13 3	131	S132 same (circuit logic semiconductor)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/17 12:22
S13 7	11	S136 with (timer counter)	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/17 12:23
S13 6	770	time near3 fail\$3 near3 until	US-PGPUB; USPAT; EPO	OR	OFF	2006/08/17 12:23

## EAST Search History

S13 8	25	("4346459"   "4358823"   "4521871"   "4532594"   "4610013"   "4819232"   "5189316"   "5203003"   "5206778"   "5423037"   "5451892"   "5511161"   "5544077"   "5555404"   "5590061"   "5627962"   "5644700"   "6144251"   "6208170"   "6229343"   "6256744"). PN. OR ("6425092").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/17 14:56
S14 0	6032	redundant near3 (logic circuit)	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/17 15:01
S13 9	11	S138 and (timer counter)	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/17 15:01
S14 1	3	S140 near6 (time near3 (interval elaps\$3))	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/17 15:02
L20	29	18 and 19	US-PGPUB; USPAT; EPO	OR	OFF	2006/09/01 20:11
L19	85316	(tim\$3 count\$3) near6 (replac\$3 repair\$3)	US-PGPUB; USPAT; EPO	OR	OFF	2006/09/01 20:11
L21	23	("3147370"   "3344408"   "3351910"   "3377471"   "4234926"   "4251874"   "4864506"   "4931963"   "5008827"   "5043908"   "5063857"   "5122976"   "5276844"   "5581228"   "5638442"   "5668973"   "5799093"   "5812991"   "6098032").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/09/01 20:14
L23	5	18 and (indicat\$3 warn\$3) near3 (repair\$3 replace\$4)	US-PGPUB; USPAT; EPO	OR	OFF	2006/09/01 20:15
L22	2	18 and (pre-emptive\$2 preemptive\$2)	US-PGPUB; USPAT; EPO	OR	OFF	2006/09/01 20:15
L27	157	25 with (counter timer)	US-PGPUB; USPAT; EPO	OR	OFF	2006/09/01 20:16
L26	227	25 same (counter timer)	US-PGPUB; USPAT; EPO	OR	OFF	2006/09/01 20:16
L25	2478	(replac\$3 repair\$3) with (time near3 predetermined)	US-PGPUB; USPAT; EPO	OR	OFF	2006/09/01 20:16
L24	5	18 and (indicat\$3 warn\$3) near3 (repair\$3 replac\$5)	US-PGPUB; USPAT; EPO	OR	OFF	2006/09/01 20:16

## EAST Search History

L28	65	26 same circuit	US-PGPUB; USPAT; EPO	OR	OFF	2006/09/01 20:17
L31	8	30 with (predetermined near3 time)	US-PGPUB; USPAT; EPO	OR	OFF	2006/09/01 20:19
L29	40	27 same circuit	US-PGPUB; USPAT; EPO	OR	OFF	2006/09/01 20:19
L32	4	("4280208").URPN.	USPAT	OR	OFF	2006/09/01 20:20
L33	3	30 with timer	US-PGPUB; USPAT; EPO	OR	OFF	2006/09/01 20:21
L35	451	(377/16).ccls.	US-PGPUB; USPAT; EPO	OR	OFF	2006/09/01 20:22
L34	0	30 and 18	US-PGPUB; USPAT; EPO	OR	OFF	2006/09/01 20:22
L18	451	377/16.ccls.	US-PGPUB; USPAT; EPO	OR	OFF	2006/09/01 20:22
L40	0	37 and 18	US-PGPUB; USPAT; EPO	OR	OFF	2006/09/01 20:23
L39	1838901	n	US-PGPUB; USPAT; EPO	OR	OFF	2006/09/01 20:23
L38	12875	37 amd 18	US-PGPUB; USPAT; EPO	OR	OFF	2006/09/01 20:23
L36	19481	(warn\$3 indicat\$3) near3 (repair\$3 replac\$5)	US-PGPUB; USPAT; EPO	OR	OFF	2006/09/01 20:23
L30	283	remind\$3 near3 (repair\$3 replac\$5)	US-PGPUB; USPAT; EPO	OR	OFF	2006/09/01 20:23
L43	17	42 same circuit	US-PGPUB; USPAT; EPO	OR	OFF	2006/09/01 20:24
L42	114	36 with (timer)	US-PGPUB; USPAT; EPO	OR	OFF	2006/09/01 20:24
L37	201	36 with (timer (predetermined near3 time))	US-PGPUB; USPAT; EPO	OR	OFF	2006/09/01 20:24

## EAST Search History

L41	88	36 with (predetermined near3 time)	US-PGPUB; USPAT; EPO	OR	OFF	2006/09/01 20:25
L45	28	timer near6 (life\$4 near3 (circuit component))	US-PGPUB; USPAT; EPO	OR	OFF	2006/09/01 20:27
L44	13	41 same circuit	US-PGPUB; USPAT; EPO	OR	OFF	2006/09/01 20:27
L46	14	("20010034733"   "20010037227"   "20020016757"   "20020161885"   "5689416"   "5923870"   "5926777"   "6381605"   "6483292"   "6484128"   "6490543"   "6556926"   "6684180"   "6738748").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/09/01 20:29
L47	6	("5489971"   "6167352"   "6173128"   "6233408"   "6389337").PN. OR ("6483292").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/09/01 20:31
L48	25	("4822334"   "5224928"   "5246418"   "5256137"   "5306235").PN. OR ("5688232").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/09/01 20:38